

# Fueling For a Match

## Key Considerations for a Performance Training Diet for Tennis Players

By Page Love, MS, RD, LD, CSCS

Because tennis is a sport requiring power, speed, agility and endurance—all skills requiring high-energy stores from both food energy and fluids—to succeed in games, matches and entire tournaments, tennis players must eat high energy, preferably higher carbohydrate diets. As an onsite nutritionist just coming from the Australian Open, outside of dehydration, the most common mistake I see is under-consumption of carbohydrates, particularly during pre- and post-match time. And as an avid ALTA participant for over 30 years, I see the same sport nutrition mistakes with recreational play, which can often mean the difference between winning and losing an important match. The following article highlights key areas where tennis players can fine-tune their diets to maximize and enjoy their best performances yet!

An optimal training diet is built over time, training the body's muscles to learn how to store more fuel over time, just as

a runner carbohydrate-loads for a marathon. For repeatedly successful games, following these guidelines can help develop winning eating strategies for tennis. The tennis training diet should be focused on high-energy foods and adequate hydration, timed appropriately before, during and after match play.

### PRE-GAME EATING AND HYDRATION:

A diet rich in complex carbohydrates is the key to performance and endurance. Carbohydrates fuel high-intensity work, which correlates to the energy required for serving, traversing the court and returning the ball. Muscles store carbohydrates as glycogen, and consuming small amounts of carbs on a regular basis ensures maintenance of maximum glycogen levels.

**Select pre-game meals and snacks that are:**

- Familiar and known to settle hunger

- High in carbohydrate to supply energy for muscle reserves, moderate in protein and low in fat

- Quickly digested (not too high in fiber or fat)

Examples of good pre-game foods include bagels, English muffins, pita bread, pasta, bread, fresh fruit, granola bars, higher carbohydrate energy bars, oatmeal, rice, grits, potatoes, corn, lima beans, black-eyed peas and beans.

Outside of hydrating properly, tennis players can also benefit from consuming small amounts of carbohydrate during tennis play. New information in sports nutrition research shows that in stop and start sports, particularly those that last over several hours of time, athletes can benefit from small bite-size servings of easy-to-digest quick-energy carbohydrate sources such as those found in sport beverages like Gatorade and PowerAde. An important tip is to favor sports drinks, as they contain carbohydrates and electro-

lytes like sodium, which are key to minimizing heat illness risk. Consuming carbohydrates during training and play has been shown to help tennis players maintain more power and accuracy. Gatorade contains 14 grams of carbohydrate per 8 ounces, which is quickly absorbed and used by working muscles. Sodium replacement is also important, since a significant amount of sodium can be lost through sweat during a match. If you feel that a regular Gatorade concentration feels like too much carbohydrate in your system, try the new G2, which contains half the carbohydrate content, but the same level of sodium as regular Gatorade products.

### NEW IDEAS FOR DURING MATCH NUTRITION AND HYDRATION:

Other options for players who do not like sport beverages are newer sport food products made from solid food components such as sport energy bars (such as Power Bar or Clif Bar), Sport Jelly Beans or sport energy gels such as Power Gel or Clif Shot. The main limitations of these sport food products over a sport beverage are that none of these contain similar electrolyte levels to current sport beverages that are recommended for re-hydration in tennis. Energy Bars for the most part contain complex carbohydrates similar to what is in bread or bagels. In fact, a whole Power Bar is similar to eating a whole medium bagel. Eating one-half of a bar of this type at a changeover, in combination with a sport beverage, would be a way to get more umph to get you through a long three-set match. Sport jellybean products are mostly sugar without significant electrolytes, and energy gels are composed of combinations of malto dextrins (a starchy carbohydrate substance) and simple sugars coming from sucrose, glucose and fructose.

### RECOVERING FROM A MATCH:

**After a tennis match, follow these guidelines:**

- Eat carbohydrates as soon as possible, preferably within 30 minutes of a game. Begin by drinking a sports drink as you walk off the court.

- Replace 150 percent of body fluids lost, or at least 20 oz. per pound of weight loss within two hours.

- Eat a high-carbohydrate meal that also contains a protein source within two hours after play to maximize muscle glycogen recovery (rebuild energy stores) and to support protein synthesis in muscles. Sometimes an energy bar works well

minutes during exercise, and two cups of water for every pound of body weight lost during training or play. Fluid is critical to decreasing the risk of dehydration and heat illness. Water molecules are absorbed into the muscle as carbohydrate feedings are converted into glycogen for storage. Limiting fluid intake limits a player's ability to store glycogen as muscle energy, and increases your risk for heat illness.

**Tips for hydrating before training or a match:**

- Limit/avoid caffeinated beverages (iced teas, coffee, colas), especially right before and after play—they may cause additional fluid loss as urine.
- The night before, fill and chill squeeze bottles or sports jugs and bring to training or on the court (have a minimum of 2 liters available courtside).
- Drink 17 to 20 oz. of fluid within two hours of pre-play.
- Drink a minimum of 4 oz. to 8 oz. per changeover during play.
- Consume enough fluids throughout the day so urine is a light or pale yellow color before starting a match.

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here too, or a fruit smoothie with protein, or just a sandwich or pasta meal is an appropriate choice, too.

During tournament play, be sure to include carbohydrates, protein, fluid and sodium in the evening meal to accelerate recovery from play. Consider lightly salting foods and consuming foods and beverages that are natural sodium sources.

Gain a better understanding of food choices and servings associated with these guidelines by reviewing the food pyramid and related articles at [mypyramid.gov](http://mypyramid.gov).

**The recommended daily number of servings from food groups for the training diet is:**

- Grains 10–12 (serving size is 1/2 cup)
- Vegetable Group 3–5 (serving size is 1/2 cup)

- Fruit Group 4–8 (serving size is a baseball-sized piece of fruit)

- Milk Group 2–4 (2 for adults, 4 for teens; serving size is 1 cup)

- Meat & Beans 2–3 portions (serving size is 3 oz. each)

- Oils (fats) at least one tablespoon of vegetable fat per day (oil cooked into food or salad dressing)

Following these guidelines is simple and can quickly become part of a tennis player's routine. When this happens, it can help a player maintain strength and concentration during training, a match or several days of tournament play. ●

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